

**REMARKS**

**Applicant's April 24, 2003 Amendment:**

As an initial matter, Applicant notes that in the May 21, 2003 Communication from the Examiner, the April 24, 2003 amendment was not entered. Applicant has made the same claim amendments in the present Amendment to ensure that the claim amendments are entered.

Applicant notes that an additional amendment was made to claim 1, as compared to the amended claim 1 in the un-entered April 24, 2003 Amendment.

Further, Applicant notes that the Excess Claim Fee payment was made on April 24, 2003, and as such is not submitted herewith.

**Claim Objections:**

The Examiner has objected to claims 9, 12 and 13 as being in improper dependent form. Although Applicant disagrees, Applicant has amended each of the above claims as shown in the attached Appendix, and has written each of these claims in independent form.

Further, Applicant notes that the above referenced claim amendments have been made to merely clarify the claimed invention and are not intended to narrow the original scope or spirit of the claims, in any way.

**Claim Amendments:**

In addition to the above referenced amendments, Applicant notes that claims 1, 3, 5, 14 and 15 have also been amended as shown in the attached Appendix. Applicant submits that the above referenced claim amendments have been made to merely clarify the claimed invention and are not intended to narrow the original scope or spirit of the claims, in any way.

“Contact” v. “Connection” v. “Circuit”:

Applicant notes that throughout the prosecution of the above referenced application, a plurality of terms have been used in the claims to signify an electrical connection between the first and second branches and a device. Applicant notes that although these different terms have been used (and the term “circuit” is now used), Applicant submits that within the context of the present invention, these terms are synonymous and encompass the same scope. Applicant has amended the claims to use different terms to make the claimed invention as clear as possible, but in doing so has not intended to surrender any subject matter or embodiments of the present invention.

Specifically, Applicant submits that when a contact is in electrical “contact” with a device, it is also in electrical “connection” with the device, as well as completing an electrical “circuit” with a device, with the scope of the present invention.

**Claim Rejections:**

Claims 1 and 3-16 are all of the claims pending in the present application, and currently all of the claims stand rejected.

***35 U.S.C. § 102(e) Rejection - Claims 1, 3-5, 7 and 14-16:***

Claims 1, 3-5, 7 and 14-16 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 3,115,379 to McKee. In view of the following discussion, Applicant respectfully disagrees.

With regard to this rejection, the Examiner has provided attachments 1 and 2 in which the Examiner marked up copies of Figure 11 of the McKee reference, so as to aid in the understanding of the Examiner's position.

As an initial matter, Applicant notes that the Examiner's rejection of claims 5, 7 and 14-16 is fatally flawed. With regard to claims 5 and 7, the Examiner asserts that the "housing" set forth in the claims is "inherent" within the disclosure of McKee. *See* Office Action, page 4. This assertion is contrary to the law of "inherency", which requires that the claim feature be "necessarily present" within the reference (here McKee).

Applicant does acknowledge that when a reference fails to expressly disclose each and every element of a claimed invention (as required under 35 U.S.C. § 102), as in this case, it can be argued that a reference "inherently" teaches the missing element or elements of the claimed invention. *See In re Oelrich*, 666 F.2d 578, 581 (Fed. Cir. 1981). However, evidence of inherency in a reference "must make it clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." *Continental Can Co. USA Inc. v. Monsanto Co.*, 948 F.2d 1264, 1269 (Fed. Cir. 1991) (emphasis added). "Inherency, however may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *Id.* (citing *In re Oelrich*, 666 F.2d 578, 581 (fed. Cir. 1981) (quoting *Hansgirk v. Kemmer*, 102 F.2d 212, 214 (C.C.P.A. 1939))) (emphasis in original); *see also Scaltech Inc. v. Retec/Tetra L.L.C.*, 51 U.S.P.Q.2d 1055, 1059 (Fed. Cir. 1999); and *In re Robertson*, 49 U.S.P.Q.2d 1949, 1950-51 (Fed. Cir. 1999). Even if the prior art reference could have equally

been used or made with only two possibilities, a patent claim which claims one of the two possibilities will not be anticipated because that limitation was not “necessarily” present in the prior art disclosure. See Finnigan Corp. v. I.T.C., 51 U.S.P.Q.2d 1001, 1009-10 (Fed. Cir. 1999) (holding that a prior art reference that disclosed a set-up for performing only resonance or nonresonance ejection was insufficient to show, clearly and convincingly, that nonresonance ejection was inherently taught by the prior art reference). In this case, Applicant notes that the housing of the present invention is not “necessarily present” within McKee.

Specifically, Applicant notes that because there are any number of ways that the spring contact 15 can be supported (on a substrate, for example), the existence of a “housing” as set forth in the claims is not “necessarily present” within McKee.

With regard to claims 14-16, Applicant also submits that the Examiner’s argument is flawed, because the individual branches 20’ and 21’ do not complete an electrical circuit with two different devices. Specifically, Applicant notes that these contacts complete an electrical circuit with the connector 1, which is connected to a single electronic device. There is no disclosure, whatever, of the connector 1 connecting to two electrical devices. As such, with regard to claims 14-16, Applicant submits that McKee fails to disclose each and every feature of the claimed invention.

Therefore, in view of the foregoing, Applicant submits that McKee fails to anticipate any of claims 5, 7 and 14-16.

With regard to claims 1 and 3, Applicant also submits that McKee fails to disclose each and every feature of the claimed invention. Specifically, Applicant notes that McKee fails to

disclose having “first and second branches lie in two diverging planes where said branches connect to said base” as set forth in claim 1. As shown in the Examiner’s Attachment 2, of the Office Action, the two branches 20’ and 21’ are coplanar with the base 13, at the time that they intersect with the base 13. Because the branches 20’ and 21’ are coplanar when they intersect with the base, they fail to disclose the first and second branches of the present invention.

In view of the foregoing, Applicant submits that McKee fails to disclose each and every feature of the present invention. Therefore, McKee fails to anticipate the present invention as set forth in claims 1, 3-5, 7 and 14-16, and hereby requests the Examiner reconsider and withdraw the above 35 U.S.C. § 102(e) rejection of these claims.

***35 U.S.C. § 102(e) Rejection - Claims 1 and 3:***

Claims 1 and 3 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 4,963,102 to Gettig et al. In view of the following discussion, Applicant respectfully disagrees.

Applicant notes that in Gettig, with regard to the terminal T, the Examiner is asserting that the upper branch 54 and the lower branch 66 form the “U”-shape of the present invention (when viewed from the side) and that the lower branch lies in the same plane as the base of the terminal T. *See* the Examiner’s Attachment 3 to the Office Action. However, Applicant notes that the blade 54 and the upper contact 66 are two separate distinct pieces which are joined together at or near the tongues 84. *See* Figure 8 of Gettig. Therefore, Applicant submits that Gettig fails to disclose each and every feature of the claimed invention, as these members are not formed integral with the base.

In view of the foregoing, Applicant submits that Gettig fails to disclose each and every feature of the present invention. Therefore, Gettig fails to anticipate the present invention as set forth in claims 1 and 3 and hereby requests the Examiner reconsider and withdraw the above 35 U.S.C. § 102(e) rejection of these claims.

***35 U.S.C. § 102(e) Rejection - Claims 1, 3-8 and 10-11:***

Claims 1, 3-8 and 10-11 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,077,130 to Hughes et al. Again, in view of the following comments, Applicant respectfully disagrees.

Applicant notes that in the present invention, “the intersection of the two planes (which contain the first and second branch) is within the base of the U-shape.” *See* claim 1. Applicant submits that this is not disclosed in Hughes, in any way. Specifically, as shown in Figure 3 in Hughes, the arm 24 extends in a vertical plane with respect to the base 28. Because of this configuration, Applicant submits that it is clear that the planes which contain the arm 24 and the arm 26 are not intersecting within the base 28, as required by the claims. Stated differently, as the arm 24 is connected to the base 28, the arm 24 is in a vertical direction (portion 59 of the arm). Because of this configuration, the plane extending along the length of the arm portion 59, will not intersect the plane of the portion 66/67 of the arm 26 within the base 28.

In view of the foregoing, Applicant submits that Hughes fails to disclose each and every feature of the present invention. Therefore, Hughes fails to anticipate the present invention as set forth in claims 1, 3-8 and 10-11, and hereby requests the Examiner reconsider and withdraw the above 35 U.S.C. § 102(e) rejection of these claims.

AMENDMENT UNDER 37 C.F.R. § 1.111  
U.S. Application No.: 09/673,614

Our Ref.: Q61365  
Art Unit: 2833

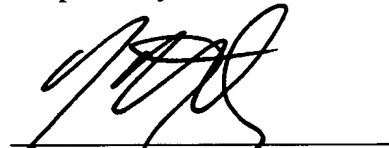
forth in claims 1, 3-8 and 10-11, and hereby requests the Examiner reconsider and withdraw the above 35 U.S.C. § 102(e) rejection of these claims.

**Conclusion:**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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WASHINGTON OFFICE

**23373**

PATENT TRADEMARK OFFICE

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**APPENDIX**  
**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**IN THE CLAIMS:**

**The claims are amended as follows:**

1. (Five Times Amended)     A connector, comprising:

a spring contact, wherein said spring contact is substantially U-shaped and has first and second branches and a base joining said first and second branches at one end for forming said U-shape, and wherein each of said first and second branches complete an electrical ~~connection~~ circuit with a device, characterized in that said first and second branches lie in two diverging planes where said branches connect to said base and the intersection of said two planes is within the base of the U-shape, and

wherein one of said first and second branches and the base are coplanar, and  
where the first and second branches are formed integrally with said base.

3. (Three Times Amended)     A connector according to claim 1, characterized in that ~~the~~ electrical contact of at least one of said first and second branches is made at the free end of said branch.

5. (Six Times Amended)     An electrical connector, comprising:

a first face,

a second face opposite said first face, and



at least one housing for receiving a spring contact and opening onto both of said first and second faces,

wherein said spring contact is substantially U-shaped and has first and second branches and a base joining said first and second branches at one end for forming said U-shape, each of said first and second branches complete an electrical ~~connection~~circuit with a device, characterized in that said first and second branches lie in two diverging planes and the intersection of said two planes is within the base of the U-shape, and one of said first and second branches and the base are coplanar; and

wherein the spring contact is positioned in the housing so that the plane containing the base of the U-shape is substantially parallel to respective planes of the faces of the connector.

9. (Four Times Amended) An electrical connector ~~according to claim 5,~~  
comprising:

a first face;

a second face opposite said first face; and

~~including~~ a plurality of housings opening onto at least one of said first and second faces and each housing receiving a respective spring contact which is substantially U-shaped and has first and second branches and a base joining said first and second branches at one end for forming said U-shape, wherein each of said first and second branches complete an electrical ~~connection~~circuit with a device, characterized in that

said first and second branches lie in two diverging planes and the intersection of said two planes is within the base of the U-shape, and one of said first and second branches and the base are coplanar, further characterized in that the spring contacts in two adjacent housings are positioned so that they are substantially parallel but the opposite way round to each other, one of said first and second branches of one contact being adjacent the other of said first and second branches of the adjacent contact.

12. (Amended)      ~~An electrical connector according to claim 5, comprising:~~

a first face;

a second face opposite said first face; and

~~including a plurality of housings opening onto at least one of said first and second~~  
faces and each housing receiving a respective spring contact which is substantially U-shaped and has first and second branches and a base joining said first and second branches at one end for forming said U-shape, each of said first and second branches complete an electrical ~~connection circuit~~ with a device, characterized in that said first and second branches lie in two diverging planes and the intersection of said two planes is within the base of the U-shape, and one of said first and second branches and the base are coplanar, wherein ~~the~~ electrical contact of at least one of said first and second branches is made at the free end of said branch, further characterized in that the spring contacts in two adjacent housings are positioned so that they are substantially parallel but the

opposite way round to each other, one of said first and second branches of one contact being adjacent the other of said first and second branches of the adjacent contact.

13. (Amended)      An electrical connector according to claim 5, comprising:  
                         a first face;  
                         a second face opposite said first face; and  
                         including a plurality of housings opening onto at least one of said first and second  
faces and each housing receiving a respective spring contact which is substantially U-  
shaped and has first and second branches and a base joining said first and second  
branches at one end for forming said U-shape, each of said first and second branches  
complete an electrical ~~connection~~ circuit with a device, characterized in that said first and  
second branches lie in two diverging planes and the intersection of said two planes is  
within the base of the U-shape, and one of said first and second branches and the base are  
coplanar, wherein one of said first and second branches is adapted to come in contact  
with a ~~printed circuit~~ first electrical device and the other of said first and second branches  
is adapted to come into contact with a ~~battery~~ second electrical device, further  
characterized in that the spring contacts in two adjacent housings are positioned so that  
they are substantially parallel but the opposite way round to each other, one of said first  
and second branches of one contact being adjacent the other of said first and second  
branches of the adjacent contact.

14. (Amended) A connector, comprising:

a spring contact, wherein said spring contact is substantially U-shaped and has first and second branches and a base joining said first and second branches at one end for forming said U-shape, and wherein said first branch ~~makes~~ completes an electrical ~~contact circuit~~ with a first device and said second branch ~~makes~~ completes an electrical ~~contact circuit~~ with a second device, characterized in that said first and second branches lie in two diverging planes and the intersection of said two planes is within the base of the U-shape, and

wherein one of said first and second branches and the base are coplanar.

15. (Amended) A connector according to claim 14, characterized in that ~~the~~ electrical contact of at least one of said first and second branches is made at the free end of said branch.